Operating Manual for #2001-SDCC Kendrick Standard Dual Channel Controller



•Plug power cord into back of controller.

•Plug power cord into a 12 volt battery.

•Turn controller on by sliding the on/off switch to "I". The LEDs will light up.

•Adjust the knobs to your preferred power setting. Each knob controls two heater outputs. We recommend about a 50% setting as a start.

This controller has the following built in features:

KENDRICK

ASTRO INSTRUMENTS

- · Zero to 100% heater control.
- Fused onboard. Auto Reset (no other dew controller on the market has this).
- On board protection from over current, over temperature, over voltage.
- 10 amp capacity (5 amps per channel).*
- · Reverse polarity protected.
- On/off switch (no other dew controller on the market has this).
- RFI (radio frequency interference) free. A critical feature for astro imagers!
- Pulse Width Modulation duty cycle control.
- 4 outputs, 2 for each control knob.
- LED Power on indicator for both outputs.
- Low voltage cut-off control with LED indication (a Kendrick standard!).
- Mosfet transistors built on board and on EACH output (no voltage drops!). Get the best possible performance out of your heaters!
- 6' detachable fused Power cord.
- · Velcro attachment. Parts included.
- 12 VDC operation.
- 1 Year limited warranty (parts and labour)

TECHNICAL SPECIFICATIONS:

Operating voltage: 12 vdc Weight: 190 grams, 6.6 ounces Dimensions: 4" x 3" x 1.35" (1.75" with knobs). Amperage capacity: 7 amps per channel, 14 amps total.

Power cord fused at 7 amps. Fuse located in tip.

TROUBLESHOOTING

- <u>Voltage measured out is zero.</u> When no heaters are attached to a channel, the controller will consider that a fault and shut down the channel, giving zero voltage.
- <u>Voltage measured is less than 12 volts.</u> The control uses a voltage control method called Pulse Width Modulation. When the channel is set, for example, to about 50%, the voltage will read about 6 to 7 volts (a heater must be attached to one output on a channel in order to gat a measurable voltage).
- <u>No LEDs come on.</u> You most likely have a blown fuse in the tip of the cigarette lighter socket.Unscrew the tip, remove the fuse and inspect. If the thin wire is broken, the fuse is blown and must be replaced. A blown fuse is indicative of a possible heater problem so your heaters will need to be inspected for possible electrical shorts.

* The controller itself has an amperage capacity of 10 amps (5 amps per channel) but the detachable Power Cord is fused at 7 amps. We do not recommend upgrading to a larger fuse as the cigarette lighter plug will get very hot.